

Juvenile and Young Adult Firearm Use in South Carolina

This project represents a collaborative effort between the South Carolina Department of Public Safety and the University of South Carolina, funded by the Bureau of Justice Statistics through the Justice Research and Statistics Association. It is a follow-up to and an expansion of, an earlier report, Juvenile and Young Adult Firearm Use in South Carolina. There were two objectives for the original project. The first was to determine the extent to which firearms are involved in violent crimes committed by children and young adults, to identify key characteristics of those arrested for committing these crimes, to identify who was being victimized by these crimes and to discover under what circumstances these crimes were being committed. The second was to learn more about what motivates children to possess firearms in the first place, how they manage to acquire firearms, and what factors are associated with the use and possession of firearms. The purpose of this report is to expand upon the first objective and to reanalyze the findings of the second objective with the goal of achieving a higher degree of confidence in the self-reported data. The first objective was addressed by analyzing South Carolina Incident Based Reporting System (SCIBRS) data for an additional two years. The second objective was addressed by employing validation techniques that allow for the identification and exclusion of suspect self-reported data. This report is organized on this basis, with the first section outlining the results of the additional SCIBRS data analysis and the resulting conclusions, followed by the results and discussion of the validated survey analysis.

Incident Based Analysis

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The data presented here were drawn from SCIBRS, a data source operated and maintained by the South Carolina State Law Enforcement Division (SLED). These data are drawn from incident reports forwarded to SLED from local law enforcement agencies throughout South Carolina. This analysis is based on data from calendar years 1996 and 1997. The data were accessed and analyzed prototype software (NIBRS Analysis) being developed in conjunction with SLED, the South Carolina Department of Public Safety's Office of Safety and Grants and the University of South Carolina's Advanced Solutions Group to make SCIBRS data more readily accessible for analysis and use by local law enforcement agencies. Of particular value was that this methodology allowed analysis free of the limitations of data collected under the Uniform Crime Report process. The incident based analysis focused on firearm involvement among juvenile arrestees (16 years old and younger, in conformance with state law) and young adult arrestees (ages 17 through 20) arrested for the Index I violent offenses of murder, rape, robbery and aggravated assault.

Findings

Firearm use was common among juveniles and young adults arrested for violent crime in South Carolina. The preference for firearms over other weapons was more pronounced among young adults (32.6%) than among juveniles (18.1%). The use of hands, feet and other personal weapons ranked first (34.7%) and blunt objects (18.8%) ranked second among juveniles. Among young adults, the preference for firearm use over other weapons was clear. Nearly a third of the young adults arrested for violent crimes had used firearms, the second ranked weapon of choice was hands, feet and other personal weapons (30.5%). The distribution of weapons used by juveniles and young adults in Index I violent crimes follows below. Although there are insufficient data to justify any discussion of trends, the difference between the degree of firearm use from 1994 to 1996 and 1997, both among juvenile arrestees and young adult arrestees is worth noting. Firearm violence accounted for 27.4% of juvenile violence in 1994 but decreased to 17.5% and 18.8% in 1996 and 1997 respectively. The same was true for young adult arrestees. While firearm violence accounted for 47.3% of young adult violence in 1994, it accounted for 33.1% in 1996 and 32% in 1997.

Weapon Use Among Juvenile and Young Adult Arrestees 1996 & 1997

Weapon	Juveniles		Young Adults	
	Number	Pct	Number	Pct
Total Firearms	717	18.1	2320	32.6
Hands, feet, etc.	1371	34.7	2172	30.5
Blunt Object	745	18.8	1105	15.5
Knife	713	18.0	988	13.9
All Other Weapons	358	9.0	447	6.3

Unknown	51	1.3	82	1.2
Total	3,955	100.0	7,114	100.0

Source: SCIBRS

Handguns were the firearm most commonly employed by juveniles and young adults arrested for Index I violent offenses, accounting for 70% of the firearms used by juveniles and 77% of the firearms used by young adults. Shotguns, rifles, other firearms and unknown or unidentified firearm types accounted for the remainder of firearm use. Among juvenile arrestees, x (xx%) of the firearms used were automatic weapons and xx (x%) of the firearms used were semi-automatic weapons. Among young adult arrestees, xx (xx%) of firearms used were automatic weapons and xx (xx%) were semi-automatic weapons.

**Firearm Use Among Juvenile and Young Adult Arrestees
1996 & 1997**

Firearm	Juveniles		Young Adults	
	Number	Pct.	Number	Pct
Handgun	498	69.5	1782	76.8
Shotgun	58	8.1	225	9.7
Rifle	38	5.3	101	4.4
Unknown Type of Firearm	79	11.0	193	8.3
Other Firearms	44	6.1	19	0.8
Total Firearm Use	717	100.0	2320	100.0

Source: SCIBRS

Firearms were the weapons most frequently used by juvenile arrestees in murders and robberies. Firearms were also the most frequently used weapons by young adults arrested for murder, robbery and aggravated assault. Only among young adults and juveniles arrested for rape was firearm use relatively infrequent. Young adult arrestees followed a similar pattern, however within each violent offense category, young adults were more likely to have used firearms than juvenile arrestees.

Firearm Use Among Juvenile and Young Adult Arrestees by Crime

Firearm	Juveniles		Young Adults	
	Number	Pct.	Number	Pct
Murder	37	67.3	199	84.7
Rape	0	0.0	15	5.7
Robbery	313	43.3	956	55.4
Aggravated Assault	367	12.3	1150	23.6
Total Firearm Use	717	18.1	2320	32.7

Source: SCIBRS

The frequency of firearm use in Index I violent crime increased with age for each year from age 14 through age 19, peaking at 38%. Young adult arrestees were more likely to have used firearms (%) in the commission of a violent crime than were juvenile arrestees (%). The number of juveniles involved in firearm violence more than doubled from age 14 to age 15, and increased by nearly 50% from age 15 to age 16.

Firearm Use in Violent Crime by Age, Juveniles and Young Adults 1996 & 1997

Age	Number	Pct*
12 & Under	44	10.3
13	51	12.8
14	82	14.8
15	218	23.5
16	309	27.4
17	557	34.4
18	607	35.9
19	610	38.1
20	485	35.1
Total	2,963	30.4

Source: SCIBRS

Males and minority groups had the highest level of reported firearm use in violent crime both for juvenile and young adult arrestees. Black male arrestees ranked first, followed by white males, white females and black females. Among juvenile arrestees, there were thirteen (13) arrests of members of other racial categories (Native Americans and Asian/Pacific Islanders), which include three (3) involving firearms. Among young adults there were twenty-one (21) arrests of members of other racial categories for violent crimes, eight (8) of which involved firearms. There were sixteen (16) reported arrests of Hispanic juveniles for violent crimes of which two (2) involved firearms. There were seventeen 17 arrests of Hispanic young adults for violent crimes of which three (3) involved firearms. Ethnicity, using the categories of Hispanic or non-Hispanic, is reported separately from racial categories.

Firearm Use Within Violent Crime by Race and Sex

Race/Sex	Juveniles		Young Adults	
	Number	Pct	Number	Pct
Black Female	7	5.0	23	14.6
Black Male	279	34.9	713	58.0
White Female	4	14.8	10	25.7
White Male	43	18.0	109	28.3

Source: SCIBRS

The most commonly occurring location for violent crimes in which firearms were involved was the home, operationally defined as either a residence or an apartment. Among juvenile arrestees, 33.9% of violent crimes involving firearms occurred at home. Among young adult arrestees, 36% of violent crimes involving firearms occurred at home. The second most common location for both groups was highways/roads. One difference of

note between juveniles and young adults was that while only 1.1% of firearm incidents involving juveniles occurred in bars/nightclubs, 3.6% of firearms incidents involving young adults occurred in that setting. The relatively low occurrence of firearm violence in school settings, 25 arrests accounting for 3.6% of juvenile firearm violence arrestees and 12 arrests accounting for .5% of young adult firearm violence arrestees is also worth noting.

**Location of Firearm Violence for Juveniles and Young Adult Arrestees
1996 & 1997**

Location	Juveniles		Young Adults	
	Number	Pct	Number	Pct
Home	239	33.9	813	36.0
Highways/roads	213	30.3	593	26.3
Dept. Store/Discount Store	36	5.1	16	0.7
Convenience stores	35	5.0	178	7.9
School (K-12)	25	3.6	12	0.5
Commercial building	19	2.7	152	6.7
Parking lot/garage	17	2.4	69	3.1
Restaurant	15	2.1	84	3.7
Bar/nightclub	8	1.1	82	3.6
All Other Locations	97	13.8	258	11.4
Total	704	100.0	2,257	100.0

Source: SCIBRS

Over the entire two year period, the most common time period during which juvenile firearm violence occurred was from 9 PM to midnight. This time period was the most frequently occurring time period on weekdays, and the second most common time period during weekends. The most commonly occurring time period on weekend days was midnight to 7 AM.

**Time of Juvenile Firearm Violence
1996 & 1997**

	Weekend		Weekday	
	Number	Pct.	Number	Pct.
Mid – 6:59	36	22.5	83	15.3
7 AM - 7:59	1	.6	9	1.7
8 AM - 11:59	14	8.8	54	9.9
Noon – 2:59	25	15.6	47	8.6
3 PM – 5:59	16	10.0	111	20.4
6 PM – 8:59	33	20.6	118	21.7
9 PM – 11:59	35	21.9	122	22.4
Total	160	100	544	100

Time of day was also analyzed on the basis of school and non-school weeks. Presumably, school being in session would have an influence on when juvenile crime occurs, and therefore also on the occurrence of crimes involving firearms. A factor to be considered in looking at time of occurrence in dealing with juveniles is school being in session. The most commonly occurring time period on weekdays when school was in session, was from 6 PM to 9 PM.

**Time of Juvenile Firearm Violence During the School Year
1996 & 1997**

	Weekend		Weekday	
	Number	Pct.	Number	Pct.
Mid – 6:59	23	17.8	57	13.2
7 AM - 7:59	1	.8	7	1.6
8 AM - 11:59	11	8.5	42	9.7
Noon – 2:59	25	19.4	38	8.8
3 PM – 5:59	15	11.6	91	21.1
6 PM – 8:59	27	20.9	103	23.8
9 PM – 11:59	27	20.9	94	21.8
Total	129	100	432	100

The pattern of juvenile firearm violence in terms of time of occurrence did change from school session to out of school session. During the summer, juvenile firearm incidents occurred later on the weekdays than during the school session. This was also true for weekend days, however the number of juvenile firearm violence was not sufficient to attach a great deal of confidence to any patterns.

**Time of Juvenile Firearm Violence, School out of Session
1996 & 1997**

	Weekend		Weekday	
	Number	Pct.	Number	Pct.
Mid – 6:59	13	41.9	26	23.2
7 AM - 7:59	0	0.0	2	1.8
8 AM - 11:59	3	9.7	12	10.7
Noon – 2:59	0	0.0	9	8.0
3 PM – 5:59	1	3.2	20	17.9
6 PM – 8:59	6	9.4	15	13.4
9 PM – 11:59	8	25.8	28	25.0
Total	31	100	112	100

Drug and alcohol involvement was reported by the arresting officer if drug or alcohol use by the arrestee is suspected during or shortly before the crime. Reported substance abuse among juvenile and young adult arrestees in firearm incidents was fairly uncommon. Among juveniles, 94.6% of firearm incidents did not involve a report of alcohol or drug abuse. Among young adults, 90% of firearm incidents did not involve a report of alcohol or drug abuse. When substance abuse was reported, alcohol use was more often involved than drug use or a combination of drug and alcohol use.

Drug & Alcohol Involvement in Firearm Incidents Among Juvenile and Young Adult Arrestees

	Juveniles		Young Adults	
Reported Involvement	Number	Pct	Number	Pct
No Substance Abuse	317	94.6	774	90.0
Alcohol Involvement	14	4.2	79	9.2
Drug Involvement	3	0.9	3	0.3
Alcohol & Drug Involvement	1	0.3	4	0.5
Total	335	100.0	860	100.0

Source: SCIBRS

No violent hate/bias crimes were reported involving firearm violence among juvenile and young adult arrestees. Neither was any gang related activity or involvement reported among firearm violence involving juvenile and young adult arrestees.

Juveniles were more likely to have victimized other juveniles with firearms than any other age group, with young adults constituting the next most likely group of victims. Teenagers and young adults accounted for 44.3% of the victims of juvenile firearm violence. The frequency of firearm violence victimization by juveniles decreased as the age of the victims increased. The very young (10 years old or younger) and the elderly (65 years old or older) made up 5.5% of firearm violence victims by juvenile arrestees.

Victims of Juvenile Firearm Violence by Age

1996 & 1997

Age	Total	Percent
Infant	9	1.0
1-4	2	0.2
5-9	28	3.0
10-16	229	24.8
17-21	180	19.5
22-24	57	6.2
25-34	180	19.5
35-44	135	14.6
45-54	59	6.4
55-64	33	3.6
65-99	12	1.3
Total	x,xxx	100.0

Source: SCIBRS

The victims of firearm violence by young adults were most often young adults. Thirty-six percent of the victims of firearm violence by young adult arrestees were between 17 and 21 years old, and another 11% were from 22 to 24 years old. The victimization of the very young and the very old was relatively uncommon. Victims under 10 years old made up 1.4% of young adult firearm violence victims, and victims over 65 years old made up 1.9% of young adult firearm violence victims.

Victims of Young Adult Firearm Violence by Age 1996 & 1997

Age	Total	Percent
Infant	35	1.1
1-4	3	0.1
5-9	6	0.2
10-16	252	7.6
17-21	1,185	36.0
22-24	363	11.0
25-34	708	21.5

35-44	364	11.0
45-54	225	6.8
55-64	94	2.9
65-99	61	1.9
Total	x,xxx	100.0

Source: SCIBRS

Victims of juvenile firearm violence were more often black (55.6%) than white (43.3%). This was also true of the victims of young adult firearm violence, victims were more often black (58%) than white (39.5%). Victims of juvenile firearm violence were more often male (74%) than female (26%). This same pattern held true for the victims of young adult firearm violence with 71.5% of the victims being male and 28.5% being female. Among the race/sex categories, black males were the most common victims of juvenile firearm violence, followed by white males, black females and white females. A similar pattern held true among the victims of young adult firearm violence, black males were the most common victims, followed by white males, white females and black females. There very few victims of other racial categories. This table counts the victims associated with juvenile and young adult firearm violence arrestees.

Victims of Juvenile & Young Adult Firearm Violence by Race and Sex 1996 & 1997

Race/Sex	Juveniles		Young Adults	
	Number	Pct	Number	Pct
Black Female	112	12.1	466	14.1
Black Male	402	43.5	1,447	43.9
Other Female	1	0.1	15	0.5
Other Male	3	0.3	25	0.8

White Female	125	13.5	445	13.5
White Male	275	29.8	856	26.0
Unknown Female	1	0.1	9	0.3
Unknown Male	4	0.4	26	0.8
Unknown Unknown	1	0.1	7	0.2
Total		100.0	2,257	100.0

Source: SCIBRS

In order to provide a somewhat more meaningful picture of the relative levels of victimization, victimization rates were used. Using 1997 estimates based on the 1990 census data for race/sex population, victimization rates were calculated for each of the groups. Using these data, black males were more often the victims of juvenile firearm violence with a victimization rate of per 10,000 unit of population, followed by black females at per 10,000, white males at per 10,000 and white females at per 10,000.

Firearm Violence by Juveniles: Victimization Rates by Race/Sex

Race/ Sex	Victims	1990 Population	Victimization Rate
Black Female	68	555,000	1.23
Black Male	199	485,000	4.10
White Female	44	1,223,000	.40
White Male	119	1,183,000	1.01

Note: Victimization rate expressed per 10,000 unit of population.

Sources: SCIBRS, South Carolina State Budget and Control Board, 1998

Similar to the pattern of juvenile firearm violence victimization, victims of firearm violence by young adults were more often black than white, and were more often male than female.

Black males fall victim to firearm violence by juveniles more often than any other race/sex category, followed by white males, black females and white females.

Victims of Firearm Violence by Young Adults: Race and Sex

Race/ Sex	Black Female	Black Male	White Female	White Male	Total
Unknown	10	30	5	10	55
Handgun	166	528	114	247	1,055
Shotgun	2	12	1	13	38
Rifle	16	72	11	25	124
Other Firearm	0	7	0	1	8
Total	194	649	131	296	1,280
Percent	15.2	50.7	10.2	23.1	100.0

Source: SCIBRS

Once again, the disparity in victimization among these groups is better illustrated through the use of victimization rates. Using 1990 census data, the victimization rates of black males was 13.38 per 10,000, compared to a victimization rate of 2.50 per 10,000 for white males. Victimization rates were lower among the female population: white females experienced a victimization rate of 1.07 per 10,000 compared to a victimization rate of 3.50 per 10,000 for black females.

Firearm Violence by Young Adults: Victimization Rates by Race/Sex

Race/ Sex	Victims	1990 Population	Victimization Rate
Black Female	194	555,000	3.50

Black Male	649	485,000	13.38
White Female	131	1,223,000	1.07
White Male	296	1,183,000	2.50

Note: Victimization rate expressed per 10,000 unit of population.

Sources: SCIBRS, South Carolina State Budget and Control Board, 1998.

Patterns of victimization between juveniles and young adults were similar in terms of victim/offender relationship. Persons known, but not related to the arrestee, such as friends and acquaintances were most likely to become victims of firearm violence. Strangers constituted approximately 40% of firearm victimizations by both juvenile and young adult arrestees. Firearm violence against family members was much less common. Approximately 4% of the victims had family relationships with the juvenile and young adult arrestees. By way of comparison, in 1994 family members constituted 20.7% of all violent crime victims (SLED, 1995).

Injuries Inflicted by Firearm Violence for Juvenile and Young Adult Arrestees

1996 & 1997

Injury	Juveniles		Young Adults	
	Number	Pct.	Number	Pct.
Minor Injury	117	34.5	365	10.2
Other Major Injury	91	26.8	524	14.6
Internal Injury	9	2.7	73	2.0
Severe Laceration	26	7.7	210	5.8
Unconsciousness	96	28.3	624	17.4
Total	339	100.0	3592	100.0

Victims of Firearm Violence by Juveniles and Young Adults by Relationship

Relationship	Juveniles		Young Adults	
	Number	Pct.	Number	Pct.
Family	18	4.1	57	3.6
Known to Victim	228	51.6	741	47.3
Stranger	180	40.7	643	41.1
Relationship Unknown	14	3.2	107	6.8
Victim was Offender	2	0.5	18	1.2
Total	442	100.0	1,566	100.0

Source: SCIBRS

Summary

Although firearm violence is a significant problem among juveniles, firearm violence is even more widespread among young adults. Handguns are clearly the firearm of choice among both juveniles and young adults by a wide margin. Fortunately, the use of semi-automatic and particularly, automatic weapons in violent crime appears to be limited. The likelihood of firearm use in a violent crime increases with age through the juvenile years, and peaks among young adults. The finding that black male arrestees were more likely to have used firearms in violent crimes than any other race/sex category was noteworthy. A similar, and possibly related finding was that black males are also more likely to be the victims of firearm violence than any other race/sex category. Juveniles and young adults were the most likely victims of firearm violence committed by juveniles and young adults. These findings are also in line with the finding that friends and casual acquaintances comprised a majority of the victim/offender relationships for juvenile arrestee and accounted for

almost half of the victim/offender relationships for young adult arrestees. Family members were much less likely to be the victims of firearm violence than might have been expected from historical experience. This pattern is at variance with the overall pattern of violent crime victimization, where victimization within the family is more common.

In interpreting the results of this analysis it is important to be mindful of several factors. The first is that juvenile crime, while a serious and persistent problem, historically accounts for approximately 10% of all arrests in South Carolina. Second, these findings reflect the characteristics of juveniles who were arrested for violent criminal offenses, and are in no way representative of the juvenile population in general, nor are they representative of any demographic sub-population of the juvenile population. Third, these findings are based on reported criminal incidents in which an arrest was made. Obviously no information is available on unreported crime, and when an arrest has not been made, there is no reliable way to determine the age of the offender. Nonetheless, the SCIBRS data represents a rich, if complex, source of information about criminal incidents, those who were arrested for crimes and the victims of those crimes.

References

SLED, (1995) Crime in South Carolina, 1994.

South Carolina State Budget and Control Board Office of Research and Statistics, (1998)
South Carolina Statistical Abstract '97.